

# **Technical Announcement**

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# Landsat Science Team to Help Guide Next Landsat Mission

Landsat satellites have witnessed over four decades of changes on Earth. In advance of the next Landsat spacecraft launch, the Landsat Data Continuity Mission, the U.S. Geological Survey (USGS), in cooperation with the National Aeronautics and Space Administration (NASA), announces the selection of the Landsat Science Team. This expert team of scientists and engineers will serve a five-year term, from 2012-2017, and provide technical and scientific input to USGS and NASA on issues critical to the success of the Landsat program.

"Landsat is a versatile tool that is used by farmers, scientists, and city planners," said Matt Larsen, USGS Associate Director for Climate and Land Use Change. "In fact, it's used by a broad range of specialists to assess some of the world's most critical issues — the food, water, forests, and other natural resources needed for a growing world population. This team will help the Landsat program reach its highest potential."

Since 1972, the United States has acquired and maintained a unique, continuous record of the global land surface. This impartial record has become indispensable for detecting and monitoring natural and human-induced changes to the Earth's landscape.

The Landsat Data Continuity Mission (LDCM), which will become Landsat 8 following launch in February 2013, is designed to extend Landsat's comprehensive global record for at least five years.

"The team will form a science vanguard in advancing the analysis and application of Landsat data for science and resource management," said Jim Irons, LDCM Project Scientist for NASA. "Their guidance will be invaluable as we plan for the long term future of the Landsat program."

As recognized national and international leaders in land remote sensing, Landsat Science Team members will evaluate operational and data management strategies to meet the requirements of all Landsat users, including the needs of policy makers at all levels of government. They will play a key role in ensuring that the LDCM mission is successfully integrated with past, present, and future remotely sensed data for the purpose of observing national and global environmental systems.

The Landsat Science Team members and their areas of study are:

Dr. Richard Allen, University of Idaho

Dr. Ayse Kilic, University of Nebraska

Dr. Justin Huntington, Desert Research Institute

Developing and enhancing Landsat derived evapotranspiration and surface energy products

**U.S. Department of the Interior** 

U.S. Geological Survey

Dr. Martha Anderson, USDA Agricultural Research Service

Dr. Feng Gao, USDA Agricultural Research Service

Mapping vegetation phenology, water use and drought at high spatiotemporal resolution fusing multiband and multi-platform satellite imagery

## Dr. Alan Belward, European Commission Joint Research Centre

Understanding the global land-use marketplace

## Dr. Warren Cohen, USDA Forest Service

Ecological Applications of Landsat Data in the Context of US Forest Service Science and Operational Needs

## Dr. Dennis Helder, South Dakota State University

Landsat data continuity: advanced radiometric characterization and product development

## Dr. Jim Hipple, USDA Risk Management Agency

Integrating Field-Level Biophysical Metrics Derived from Landsat Science Products into a National Agricultural Data Warehouse

#### Dr. Patrick Hostert, Humboldt University of Berlin

Synergies between future Landsat and European satellite missions for better understanding coupled human-environment systems

## Mr. David Johnson, USDA National Agricultural Statistical Service

Operational monitoring of US croplands with Landsat 8

#### Dr. Robert Kennedy, Boston University

Using time-series approaches to improve Landsat's characterization of land surface dynamics

## Dr. Leo Lymburner, Geoscience Australia

Multi-temporal Analysis of biophysical parameters derived from the Landsat Series of satellites

#### Dr. Joel McCorkel, NASA Goddard Space Flight Center

Absolute radiometric and climate variable intercalibration of Earth observing sensors

#### Dr. David Roy, South Dakota State University

Continuity of the Web Enabled Landsat Data (WELD) Product Record in the LDCM Era

#### Dr. Crystal Schaaf, University of Massachusetts, Boston

North American Land Surface Albedo and Nearshore Shallow Bottom Properties from Landsat and MODIS/VIIR

#### Dr. Ted Scambos, University of Colorado

Cryospheric Applications of the Landsat Data Continuity Mission (Landsat 8)

### Dr. John Schott, Rochester Institute of Technology

The Use of LDCM for the Monitoring of Fresh and Coastal Water

Dr. Yongwei Sheng, University of California, Los Angeles Developing Decadal High Resolution Global Lake Products from LDCM and Landsat

Drs. Eric Vermote and Christopher Justice, University of Maryland Development of Landsat surface reflectance Climate Data Records.

Dr. Jim Vogelmann, U.S. Geological Survey Ecological Disturbance Monitoring using Landsat Time Series Data

Dr. Curtis Woodcock, Boston University Better Use of the Landsat Temporal Domain: Monitoring Land Cover Type, Condition and Change

Dr. Mike Wulder, Canadian Forest Service Integrating the past, present, and future of Landsat

Dr. Randolph Wynne, Virginia Tech Making Multitemporal Work

Further information

USGS Landsat NASA Landsat